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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,043

04/24/2007

Luis Amando Ortega Mahave

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DANN, DORFMAN, HERRELL & SKILLMAN  
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PHILADELPHIA, PA 19103-2307

EXAMINER

SCHIRO, RYAN RAYMOND

ART UNIT

PAPER NUMBER

1792

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,043	<b>Applicant(s)</b> ORTEGA MAHAVE ET AL.	
	<b>Examiner</b> RYAN SCHIRO	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/14/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1792

### **DETAILED ACTION**

Claims 1-12 are pending and presented for examination. Claims 13-16 have been withdrawn from consideration as being drawn to a non-elected invention.

#### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, drawn to a method of manufacturing a metallized paper, class 427, subclass 407.1.

Group II, claim(s) 13-16, drawn to a composition, class

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the method of using the composition can be practiced with another materially different product. For example, Urscheler teaches the method of curtain coating that can be practiced with curtain layers having a viscosity in a wide range. Therefore, the method of Group I can be preformed without the specific composition of Group II.

Art Unit: 1792

During a telephone conversation with Henry Skillman on July 28, 2009 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-12.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

3. U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as unpatentable over Tholen (CA 2164154) in view of Urscheler (US 7425246).

Art Unit: 1792

5. Tholen teaches a coating agent for paper surfaces which are aluminized, as required by claim 1 (abstract). The coating agent comprises aqueous polymer dispersion and can be applied before the metal and on top of the metal as a primer to render the surface printable, as required by claim 1 (abstract). Polymers based on acrylic ester as well as acrylate and styrene may be used as the coating agent, as required by claims 5 and 6 (pages 3 and 4). Each polymer component can be varied for special objects such as using coarser dispersion particles or finer emulsion particles for various reasons, as required by claim 1. Gas permeability and high waterproofness may be controlled by using the polymer layer on top of the metal layer. A cellulose based thickener may be used, as required by claims 8 and 10 (claim 4). The polymers content of the coating agent may be 20-50%, as required by claim 7 (page 4).

6. Tholen does not teach that the coating is applied by curtain coating, as required by claim 1.

7. Urscheler teaches a method of manufacturing multilayer coated papers in which at least two curtain layers selected from aqueous emulsions and suspensions are formed in a composite freefalling curtain and a continuous web of basepaper, as required by claim 1 (abstract). The coating includes at least 2 and preferably at least 3 layers. The layers of the curtain can include coating layers, interface layers and functional layers. Each layer comprises a liquid emulsion, suspension or solution, as required by claim 1 (col. 5, lines 4-9). The interface layer can have a solids content of 0.1-65 percent and can be a starch and polyethylene acrylic acid copolymer, as required by claims 5 and 7 (col. 5-6, lines 52-15). A second functional layer with barrier and aesthetic properties and may contain additives such as thickeners and surfactants, as required by claim 8 (col. 6, lines 16-58). Surfactants that may be used in the emulsions include sodium di-

Art Unit: 1792

alkylsulfonsuccinate, which is a known anionic surfactant, as required by claim 12 (col. 14, lines 52-54). Any of the layers may include binders such as styrene-acrylate latex or carboxylated styrene-acrylate latex, as required by claims 5 and 6 (col. 5, lines 26-42). The method of Urscheler can be practiced with curtain layers having a viscosity in a wide range and a high solids content even in high speeds, as required by claims 2 and 3 (col. 7, lines 57-59).

8. It would have been obvious to a person ordinarily skilled in the art at the time of the invention to combine the polymer-metal polymer coating layers of Tholen with the curtain coating method of Urscheler to provide a polymer-metal-polymer layer on paper using curtain coating, as required by claim 1. One would have been motivated to make this combination because it is obvious that the metal layer taught by Tholen can be used as a “functional layer” as described by Urscheler to provide barrier properties. Also the third layer of Tholen is described as a printable primer layer which is another desired property of the functional layer required by Urscheler. It would be advantageous to substitute the very fast curtain coating method of Urscheler for the engraved or gravure processes of Tholen because it is obvious to optimize the speed of coating.

9. Tholen in view of Urscheler fails to teach the viscosities and static surface tensions, as required by claims 2-4, as well as the thickener quantity or the surfactant quantity, as required by claims 9 and 11.

10. It would have been obvious to a person ordinarily skilled in the art at the time of the invention to optimize the viscosities and static surface tension as well as the amounts of thickener and surfactant of the aqueous film forming composition, as required by claims 2-4, 9 and 11. It is well settled in the determination of optimum values of cause effective variables such

Art Unit: 1792

as the viscosities, static surface tension and the amounts of thickener and surfactant of the aqueous film forming composition is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

Claims 1-12 are rejected.

Claims 13-16 are withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Schiro whose telephone number is 571-270-5345. The examiner can normally be reached on Monday-Friday from 8:30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Schiro  
Art unit 1792

Application/Control Number: 10/585,043

Page 7

Art Unit: 1792

/Michael Barr/

Supervisory Patent Examiner, Art Unit 1792